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UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics —— Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, June 7, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Federal Office Building, Helena, Montana.

Warm, sunny weather and mostly adequate supplies of soil moisture provided the State with its second successive week of ideal growing conditions. Rains, however, are needed for continuing good growing conditions, as little or no rain occurred during the week, and the abundant growth of all vegetation has drawn heavily upon the present moisture supply. Areas with deficient moisture during April and May of the present growing season include the extreme northwestern counties, where seasonal amounts to date have approximated less than 50% of the normal, and several north-central and east-central counties, where the two-months precipitation has averaged as low as 65% of the normal. Above normal precipitation areas for April and May include nearly all of the southern counties, as well as those immediately east of the Continental Divide. Parts of Toole, Meagher, Sweet Grass, Ravalli, Chouteau, and Powell Counties, report more than 200% normal precipitation for April and May. The average precipitation for May for Montana amounted to 3.19 inches, which is the heaviest May amount since 1927, and the sixth heaviest May amount since records began in 1895.

Progress and condition of small grains, beets, gardens, alfalfa, hay, and other grasses were reported mostly excellent. Lack of moisture caused some burning of winter wheat and alfalfa in Sanders County, and wireworms, cutworms, and soil-blowing affected growing conditions unfavorably in Daniels County. Grain fields are quite weedy in places, with mustard and fan-weed particularly troublesome. Rye and many native grasses have headed out. Winter wheat is heading fast in some districts and is reported waist-high in many Big Horn County fields. Spring wheat, oats, and barley are coming along fast. Corn has suffered a little damage from cutworms, but is mostly doing well; seeding is about finished. Beets are in splendid condition, and are being irrigated as fast as thinning and blocking is completed. Irrigation of crops and pastures is generally underway, with water plentiful except in Sanders County.

Weather conditions were favorable for completion of most late seeding, and from summer fallowing, and cultivation of row crops. Cricket control work progressed satisfactorily in nearly all infested areas. Warm weather favored hatching of grasshoppers, but infestations so far have continued to do no great harm.

Ranges and pastures are excellent in most sections of the State. Additional rains would be of benefit, although much has attained such abundant growth that plans are underway for cutting some of the range grass for hay. A little cutting of both wild hay and alfalfa has been reported, with haying expected to be considerably earlier than for several seasons. Alfalfa has been doing well, and mostly will produce a good first crop. Some alfalfa fields are weedy.

Livestock are generally in fine shape, with ample feed and water. Much of the livestock have been moved to summer range. Some loss in Sweet Grass County occurred from consumption of poisoned grass. Farm flock shearing is well along or has been completed; range shearing is now generally underway.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING JUN 7, 1938

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Total Precipitation This Week	Total Precipitation From April 1st to Date	Total Precipitation For Corresponding Period in 1937
Billings	87	43	*	T	4.59	2.30
Bozeman	80	42	*	0.00	7.18	4.54
Conrad	*	*	*	0.00	#4.06	1.66
Cut Bank	78	28	*	T	#5.15	1.72
Fort Peck	84	42	*	T	#1.80	0.75
Glendive	85	42	*	0.02	#2.50	0.97
Great Falls	81	38	*	0.00	#3.99	0.94
Havre	86	36	72	0.00	2.75	0.96
HELENA	82	41	85	0.00	4.26	1.59
Kalispell	84	40	60	0.00	2.09	2.48
Lewistown	83	29	*	0.02	3.18	1.46
Malta	85	38	*	0.00	#3.33	1.02
Miles City	88	44	84	T	#2.87	2.03
Missoula	86	44	92	0.00	#3.43	2.20
Poplar	84	38	*	T	#2.17	0.56
Stanford	*	*	*	0.02	4.82	0.75
Average				T	3.64	1.62

Corrected to agree with May total. *No Data.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bur. of Agr. Economics.

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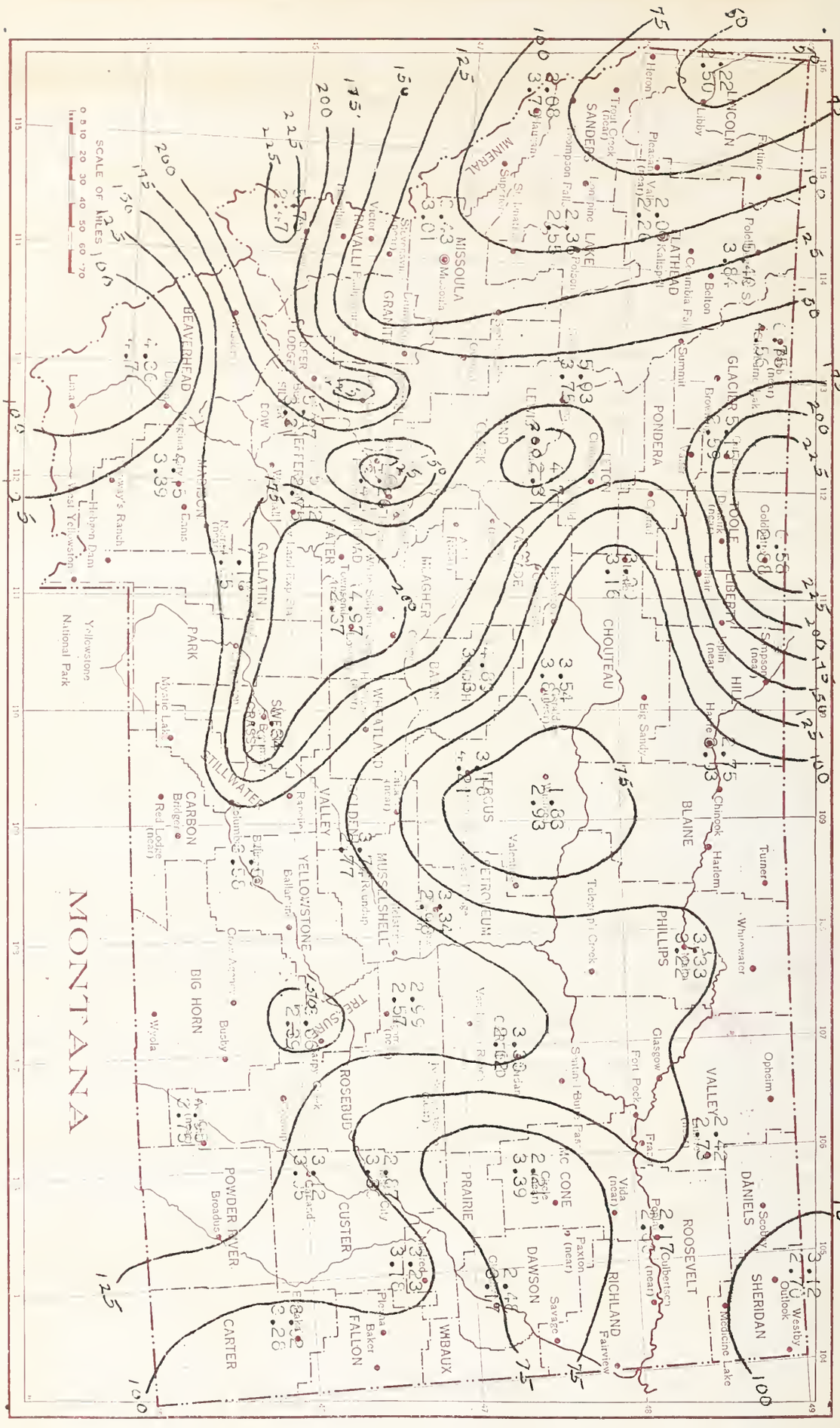
Helena, Montana
June 8, 1938



This map shows the percentage of normal precipitation that has occurred in Montana during the first two months, April and May, of the 1938 crop growing season.

Percentage lines are drawn for each difference of 25 per cent.

The upper of each typed pair of figures indicates the actual amount of precipitation that occurred in that region during April and May, 1938; the lower figure of the pair indicates the normal precipitation for April and May.

U.S. Weather Bureau,
Helena, Montana

The following county summaries of crop conditions for the week ending June 4, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Heavy rains over county first of week; temperature warmer. Seeding completed and crops getting good start. Moisture good for crop growth with outlook for irrigating water good. Lambing finishing up. All livestock out. Grass good. Cricket and hopper hatchings slowed up; with reports of very few hatchings to date.

BIG HORN: The most ideal growing weather of the year prevailed during the past week. Few light showers early in week. All small grain crops in excellent condition. Winter wheat heading out, in many places is waist high. Some fields badly infested with weeds, other small grain doing well but somewhat late. Beet crop being thinned and best stand in years reported. Corn and potatoes practically all planted. Alfalfa promising good crop. Range best in years with possibility of an above normal wild hay crop. Ample labor. Crickets becomming more active with warmer weather but are held in check by control methods.

BLAINE: Clear, sunshiny days with moderate temperature prevailed throughout entire week. No precipitation. Growing conditions excellent. All crops showing exceptionally good growth during week. Thinning of sugar beets general thruout Milk River Valley. Grasshoppers hatching in local areas but no poisoning done as yet, as hatching areas are largely confined to mountain areas. Livestock in excellent condition. Range exceptionally good and grass continues to make rapid growth.

CARBON: Weather fair and warm. Temperatures reported in Belfry area range from 54° to 86° with light rain Monday. All crops seeded except a few beans. A few farmers have not planted potatoes along mountain range. Winter wheat about ready to head in western section of county, and in some sections it is already out of the boot. With warm weather grains are growing very rapidly with a good stand reported in all sections. Ample supply of irrigation water. Some sections irrigating hay meadows but row crops as reported have not needed any irrigation since the rain. Farmers are talking of starting to irrigate grain fields in near future on account of heavy growth taking moisture from the ground. Sugar beet growers are thinning beets. Many report good stands. Working conditions are ideal. Livestock condition good.

CASCADE: Cool nights and warm days have made ideal growing conditions. No crop damage resulting from any cause. Summer fallowing about 95% complete. Seeding of all crops practically finished. Thinning and hoeing of sugar beets under way. Cutting of wild hay, especially cheat grass hay in the foothills, commenced middle of the week. Livestock in excellent condition with ample feed. Surplus of labor. Poisoning operations on Mormon crickets continue in full swing with control measures effective to date. Large flight of sugar beet webworm moths now in progress. Some worms have hatched and some damageto gar ens is in evidence.

CHOUTEAU: Rainfall approximately .5 inch, growing conditions excellent. Crops showing excellent growth in all sections, the area previously dry in west section has had heavier rains than other areas of the county. Grass improving with ample moisture; all livestock looking excellent. Cricket control work progressing satisfactorily. Hatching heavy in some areas.

CUSTER - POWDER RIVER: Generally fair and warm except for local showers Monday, Growing conditions good. All crops now making good growth with warmer weather. Irrigation again resumed. Planting completed except for small acreage of corn and late forage crops. Sugar beet thinning in full swing. Winter grains good. Hay crops continue good growth. Range conditions unchanged with all stock in excellent shape. Shearing started past week with wool rather clean and of good quality.

DANIELS: Few scattered light showers during fore part of week. Latter part windy and dry. Growing conditions not too favorable. Grain crops making slow growth. Some fields damaged by soil blowing during latter part of week. Considerable damage reported by wireworms and cutworms. Some fields reported in scattered localities completely destroyed by worms. Some reseeding being done. Pastures showing good growth in low places providing ample feed for livestock on hand. Many hilltops still nude due to last season's drouth and erosion. Labor situation unchanged. Hatching of grasshoppers reported in some areas.

DAWSON: Seasonably warm weather, with growing conditions generally good. Rather high wind at end of week, but very little soil blowing reported. Crops as a whole in good shape and growing nicely, with bulk of seeding done with exception probably of some feed crops. Summer fallowing started in scattered areas. Livestock in good condition, water situation good, and native grasses coming along well. Grasshoppers hatching quite thick in one or two localities.

FALLON - CARTER: Precipitation .77 inch, rather uniform altho with scattered showers throughout both counties, moisture somewhat increased further south in Carter. Crop conditions good, spring sown grain excellent, winter

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sown grain appears quite weedy, however, growth good and growing fine. Grass excellent, livestock continues to show good gains. Early lambs reported 30 to 35 pounds at present time.

FERGUS: Warm, good growing conditions. Crops made good progress during week with plenty of moisture to date. Additional moisture will be needed soon to continue present rate of development. Some winter wheat heading. Grass heading out. Alfalfa fields will produce at least one good crop of hay. Livestock in excellent condition. Crickets in Plum Creek and Fort McGinnis section being controlled, about half of area has crickets killed. Grasshoppers becoming numerous in some sections, and many hatched during the week.

GALLATIN: Increased temperatures, few local showers fore part of week. Hail Sunday in southern section. All crops and range making very rapid growth. Indications are for earlier haying season than last year. Small strip thru Amsterdam area hailed so badly that some damage to pea crops has occurred. Some hailed alfalfa stands have been cut. Seeding near completion in southern portion of county. Summer fallow under way in dry land area. Grasshopper hatch in certain areas of County has exceeded expectations as determined from egg survey. Range shearing started. Farm flock shearing well under way.

GARFIELD - PETROLEUM: Few scattered showers during week. Weather generally cool to moderate with growing conditions good. Crop conditions good except for local cutworm damage. All except late feed crops and corn seeding is complete. Cattle conditions continue good. Sheep conditions generally good with a good to excellent lamb crop complete. Shearing beginning. Range conditions satisfactory. Grasshopper hatching of serious proportions reported in central Petroleum County.

GLACIER: Growing conditions excellent. Grass best in years. Some late farming still being done. No wind this past week. Few scattered showers over county. Hay and grain in excellent condition, as are pastures and wild hay meadows. Grain stooling heavily. Livestock in very good shape. Some shearing to begin next week. Labor adequate.

HILL: Precipitation .14 inch. Ideal growing conditions. Crickets doing some damage in southeastern part of county. Grasshoppers hatching throughout county, no damage as yet. Range conditions good. Livestock in good shape. Surplus of labor.

JUDITH BASIN: Temperatures moderate, rainfall slight, growing conditions excellent. Soil moisture good in most sections of county. Crops growing fast. Many fields of winter wheat are very weedy. Grasshoppers have apparently not appeared as yet. Crickets are growing fast and threatening crops in northwestern portion of county. Conditions of livestock improving. Range best in ten years. Abundance of feed for the number of stock.

LAKE: Light showers over entire county first part of week. Growing conditions ideal. All crops growing rapidly. First crop of hay and clover being cut in Moiese district. Winter wheat heading rapidly. Beet thinning in full swing. All irrigation canals running to full capacity. Ranges and pastures in excellent condition. Shearing completed. Sheep moved to summer ranges. Crickets migrating. Heavy infestations of grasshoppers in scattered portions of county. Farmers controlling grasshoppers by poison.

LEWIS & CLARK - BROADWATER: Only small amount of precipitation. Warmer temperatures making all plant growth forge ahead fast. Conditions very favorable for practically all crop growth. Sugar beets germinated very good with little irrigating up needed. Cool weather earlier in season has delayed germination in some instances. Thinning of beets starting. Acreage similar to 1937. Lamb and calf crops both show high percentages. Grass conditions excellent. No insect damage in Lewis & Clark, some hoppers starting in Broadwater. Mormon crickets in Broadwater being poisoned by Forest Service.

MADISON - JEFFERSON: Best growing conditions throughout entire spring. Warm, quiet days. Light showers fore part of week. Crops show excellent growth during week, better than any previous week of this season. Late potatoes are planted, little or no grain remains to be sown. Irrigating general. Thinning of sugar beets and cultivation of row crops general. Pasture and range conditions best in years. Abundance of new grass in grazing sections. Hoppers and crickets appearing in few areas but no serious damage reported. Gophers in great numbers in some districts.

MEAGHER: No precipitation. Warm. Crops and grass making splendid growth. Flood water runoff receding by end of week. Small grain crop prospects good. Grass conditions continue very good. Irrigation water supply promises to be greater than for several seasons. Livestock in excellent condition. No trading in either wool, lambs or cattle reported. Labor supply plentiful. Cricket infestations appear to be considerably larger than last year. Grasshoppers just hatching in some localities, and very spotted.

(Continued on Page 3.)

MISSOULA: Bright, warm weather all week. Excellent growing conditions. All crops growing especially well. Practically all spring seeding completed. Soils drying out on top. Irrigation in full progress in all parts of county. Water plentiful. Cultivating, blocking and thinning of beets in full progress. Pastures and ranges in good condition. Livestock improving. Labor balanced.

MUSSELSHELL--GOLDEN VALLEY: Showers in various localities. Cloudburst in western part of Golden Valley. Growing conditions ideal. Crop conditions very good. Winter wheat far enough along so there is assurance of a crop unless insects or hail cause serious damage. Spring crops coming along in fine shape. Best growth since 1927 for this time of the year. Livestock in very good condition. Abundance of grass on ranges. Better percentage in calf and lamb crops than for many years, more twin lambs saved this year than for quite a long time. Wool is longer and cleaner than at any time since 1927, due to plenty of feed.

PARK: Rain early in week followed by warm weather. Crop conditions excellent. Wetness has delayed summer fallowing. Farmers have utilized high water by irrigating pastures and meadows. Many considering starting irrigating grains soon. Livestock in good shape. Shearing started. Few wool clips sold. No enough work for numoer of laborers. Hoppers and crickets not appearing as numerous as formerly feared.

PHILLIPS: Rain at Malta .84 inch. Scattered showers throughout county. Warmer, no wind. Most dryland seeding completed except corn and feed crops. Beets being thinned. Crops all looking good. Livestock condition good. Range making excellent growth. Surplus of labor.

PONDERA: Weather warmer and ideal for crop growth. Local showers first of week. Practically all seeding completed except for few who are reseeding some patches due to insect damage. Nearly all crops up with exceptionally good stands. Summer fallow operations well under way on most farms. Livestock in excellent condition. Nearly all range stock moved to summer grazing areas. Labor supply adequate. Nearly all beet laborers are placed, many of whom are local and quite a numoer native citizens. Grasshoppers hatching, but no damage being done to crops. Crickets do not appear to be in sufficient numbers to cause any damage. Some damage to wheat fields from wireworms.

PRAIRIE: Good shower in southern edge of county fore part of week, but rest of county received only trace of moisture. Growing conditions favorable. Crops looking very fine. Winter rye headed out. Grain has stooled until it is very thick on the ground, and it will take a large amount of moisture to bring it along for a maximum crop. Grasshoppers appearing in large numbers on idle fields and buffer strips. Range lands are green and making good growth. Livestock continues to improve.

RICHLAND: Light showers in certain portions of county fore part of week. Good growing weather, and crops are rapidly coming to the front. Thinning of beets in irrigated valley in full swing with fair to good stands being reported. Grain crops in dryland area growing nicely. Some losses of grain crops but more losses of corn occurring from cutworms. Some fields also of corn have been seriously injured by wireworms. Grasshoppers hatching out in parts of county but mostly in irrigated fields. Mixing of poison bait started this week. Poisoning in parts of county will start next week.

ROOSEVELT: Local showers over county varying from cloudbursts to traces of precipitation. Growing conditions good. Temperatures warm. All crops continue to make excellent growth with exception of a few spots damaged by wind erosion earlier in spring. Most of corn acreage seeded, some up. Few corn fields being reseeded due to cutworm damage. Fall rye headed out. Ranges continue to improve. Wireworm damage to some fields in north central part of county appears to have leasened. Grasshoppers hatching scattered with little demand for poisoning.

ROSEBUD: Local showers over small area Monday. Balance of week clear with rising temperatures. All dry land crops making rapid growth. Abundant growth drawing heavily upon moisture supply. Winter wheat heading rapidly. Alfalfa fields very weedy. All livestock continue to improve with best range conditions in several years. Shearing getting under way in few localities.

SANDERS: Precipitation .27 inch. Lack of moisture in all parts of county. Crop conditions fair. All dryland crops showing need of rain. Some winter wheat and alfalfa burning. Harvesting first cutting alfalfa started. Spring seeding making fair growth but needing rain badly. Supply of water for irrigation very low for crop needs. Livestock doing well, but lower ranges drying rapidly. Grasshoppers hatching in serious numbers in a few areas.

SHERIDAN: Growing conditions satisfactory. Warm weather followed light rainfall in early part of week. Continued reports on wireworm and cutworm damage in various parts of county. Livestock and labor situations unchanged.

(Cont'd on Page 4.)

STILLWATER: Good growing weather entire week. Later part very warm with some wind that is rapidly drying up fields that were too wet to plow earlier in the week. All grain in good condition and making very rapid growth. Most of grain fields are weedier than usual. Practically all of spring grains has been seeded. Winter rye heading out. Many farmers busy with summer fallow operations. Beet growers are all busy thinning beets and getting ready to irrigate. Plenty of irrigation water available for beets, grain and hay crops. All livestock in good condition. Few reports received of small numbers of sheep being lost following rainfall in May. Considerable demand for feeder pigs. Abundance of grass in county. Considerable range to lease. Surplus of labor.

SWEETGRASS: Weather cool and cloudy, near frost two nights. Precipitation .35 inch. Growing conditions good. Cool for gardens. Alfalfa and grains growing rapidly. Livestock gaining and growing rapidly. However, considerable loss in sheep and cattle is reported from poison on ranges and pastures. Labor situation unchanged. Crickets hatching and growing slowly. Grasshoppers appearing in limited numbers in spots.

TETON: No precipitation. Ideal growing conditions, temperatures around 80°. According to reports from weather stations, western half of county had at least one inch more rain during May than balance of county, the highest being at Choteau with 4.84 inches. Crops responding wonderfully to past rains and warm weather. Winter wheat 10 to 12 inches high. Spring wheat in southern half of county very late.

TOOLE: No precipitation. Temperatures higher, growing conditions very good. Practically all seeding completed, summer fallow operations started. Wheat coming in excellent shape throughout entire county. Excellent grass.

VALLEY: General rain northern portion Monday. Drying winds southern portion for two days. Early seedings stooling heavily, late seedings coming good. Reports eastern and southern portion of county too dry for summer fallowing. Army cutworms working insome fields. Reports of grasshoppers hatching in few localities.

WHEATLAND: Warmer temperatures during week with few light showers. Growing conditions excellent and grass looks good. Very light infestation of grasshoppers noticed during past week.

WIBAUX: Precipitation .11 to .33 inches. Excellent growing conditions. Wheat fields in very good condition and heavy stands fromstooling. Small cutworm damage reported. Grasshoppers hatching in large numbers and control campaign will commence in few days. Good stands of both fall and spring seeded crested wheatgrass reported. Corn planting well advanced, an exceptionally large acreage being planted. Seeding of millet commenced with also a large acreage being planted. Lamb crop reported above average. Sheep shearing started.

YELLOWSTONE: Trace of precipitation. Weather warmer. Growing conditions excellent. Crop conditions excellent although irrigated areas getting dry and irrigation of all crops under way, with full heads of water running. Winter wheat on dry land areas excellent. Most thinning and blocking of beets completed. Some sweet clover cut for hay. Livestock in good condition. Lamb and calf crops good. Best range conditions in past ten years. Surplus of labor. Oiling starting on Huntley Project for control of crickets. 35 miles of tin and 82 miles of oil barrier are holding cricket infestation out of all irrigated lands.

FLATHEAD: General precipitation throughout county first part of week with excellent growing weather last half. All spring crops doing very well. Winter Wheat looking good. All other crops planted and ahead of this time last year. Range and livestock condition good.

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Helena, Montana
June 7, 1938

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics —— Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, June 14, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Federal Office Building, Helena, Montana.

Weather conditions during the week ending June 14 were less favorable for advancement of crops, pastures, and ranges than in the preceding two weeks. Unusually low temperatures caused some frost damage to beans, potatoes, corn, tomatoes, fruit, and a little wheat in scattered areas near the middle of the week, and high winds during the first three days, and cutworms, caused additional damage to small grains in the extreme northeast. Dryland crops and lower ranges in the western third of the State have begun to show the effects of continued dry weather as only a few light showers of little consequence occured in this part during the past week. Insome extreme western localities, winter wheat has been reported burning, alfalfa considerably reduced as to prospective yield, and spring grains slowed up or at a standstill. In the more eastern two-thirds of the State, however, growing conditions have continued mostly favorable, with showers averaging from 1/4 to 1 3/4 inches at the close of the week improving the general crop and range condition. While irrigation needs have increased, supplies generally have been adequate with the exception of a few extreme western localities. Irrigated crops are mostly excellent, with more water available this season for pastures and hay crops than usual.

Except as previously noted, and where heavy growth of weeds has interfered, winter wheat has maintained a generally excellent condition, and continues to head. Rye has headed out, and some rye hay has been harvested. Spring wheat and other small grains are mostly doing well. Much of the spring grain crop, like winter wheat, has stooled heavily, and the resultant dense stands will require more than the usual amount of moisture for growth during the hot weather periods. Corn has been slow, and is not as far advanced as it should be. Gardens have also been slow. Beets continue doing fine, and are being cultivated or irrigated, as are other row crops. Some reseeding of wind-and-worm damaged fields to late forage crops or flax is being done in the northeast. Summer fallowing has been completed in a number of areas. Strawberries are ready for market in the west.

While lower ranges have been drying up to some extent in the extreme west, conditions of ranges and pastures in other sections have continued good to excellent. Native grasses have headed out with an abundance of seed that is expected to reseed much of the grassland that has been badly depleted in recent years by drouth and overgrazing. Haying progressed except as showers interfered. Much of the early cut has been intended for catching cheat grass.

Livestock continue to gain. Shearing was temporarily halted by showers and cool weather. Wool is reported clean and of good quality, largely as a result of favorable weather conditions and freedom fromdust storms. Very little complaint has been heard in connection with grasshoppers. Crickets have spread in places, but little damage to grain crops has occurred, as control measures have continued mostly effective.

TEMPERATURE AND PRECIPITATION DATA, WEEKING ENDING JUNE 14, 1938

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Total Precipitation This Week	Total Precipitation From April 1st to date	For Corresponding Period in 1937
Billings	86	40	*	1.66	6.25	5.99
Bozeman	76	34	*	0.23	7.41	6.86
Conrad	*	*	*	0.16	4.22	4.31
Cut Bank	75	35	*	0.21	5.36	5.30
Fort Peck	88	40	*	0.28	2.08	2.92
Glendive	92	39	*	0.16	2.66	3.43
Great Falls	82	39	*	0.66	4.65	3.03
Havre	88	40	52	0.16	2.91	3.58
HELENA	76	36	62	0.14	4.40	2.49
Kalispell	82	38	62	0.11	2.20	3.46
Lewistown	83	30	*	0.41	3.59	3.95
Malta	88	34	*	1.06	4.39	4.63
Miles City	90	42	80	1.72	4.59	3.24
Missoula	84	34	64	0.11	3.54	2.43
Poplar	89	37	*	0.40	2.57	1.09
Stanford	*	*	*	0.58	5.40	2.57
AVERAGE	--	--	--	0.51	4.14	3.70

* No data

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bureau of Agri. Economics

Series - 1938 - No. 11
Helena, Montana
June 15, 1938

The following county summaries of crop conditions for the week ending June 11, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: No precipitation, drying winds. Growing conditions good. Irrigation water adequate. Most lambing finished, grass good. Careful watch is being kept for cricket and hopper hatchings.

BIG HORN: No precipitation. Some high winds but growing conditions have been very good. Winter wheat heading out and spring wheat and other small grains doing well. Beet thinning general and other cultivated crops doing well. First cutting of alfalfa hay started. Grass on range mostly headed out and much depleted range being reseeded. Cattle in good shape. Labor plentiful. Crickets menacing, with control measures being carried on. A few grasshoppers reported but no damage done as yet.

BLAINE: Slight precipitation Thursday night. Growing conditions excellent in all parts of county. Altho crops are not suffering, rain would be very beneficial. No insect damage or requests for grasshopper poison as yet. Livestock in good condition. Range grass showing excellent growth.

CARBON: Winter wheat heading out. Some lodging in areas where crop was heavy. Thinning of beets well along. Cultivation of beans in progress. Harvesting of hay started, particularly in areas infested with cheat grass. Crop prospects in both dry land and irrigated sections very good. Summer fallowing well under way. Range conditions show heavy growth of grass, most of which has headed out with seed. Stock in good condition but in small enough numbers that ranges will benefit very materially with no possible chance of over-grazing.

CASCADE: Precipitation .27 inch which fell early Thursday evening, after a two-day severe wind, has restored crop outlook to excellent. Seeding of sugar beets and potatoes and small grains on irrigated lands now complete. Summer fallowing in dryland areas practically completed. Streams all high and ample water for irrigation is assured. Ranges in best condition in a decade, with more than ample grass for livestock available. Livestock in excellent condition with better than average lamb and calf crops being reported. Surplus of labor. Sugar beet webworms commencing to hatch and doing slight damage to gardens and hedges. Moth fly continues heavy. Mormon cricket infestation not as severe as anticipated in some communities. Control program effective in protecting crops to date.

CUSTER - POWDER RIVER: Good showers reported for northern and eastern parts of Custer County Wednesday night. Growing conditions good. Irrigation continues in full swing with water supply plentiful. All crops making fine growth. First crop of alfalfa about ready. Dry land crops remain good although more rain needed to make them certain. Winter grains, especially rye, have made excellent growth. Grass and water situation on range continues good with all stock gaining. Better than average lamb and calf crops. Shearing temporarily stopped on account of cool weather. Crickets continue to spread in south country. Small amount of damage to grain crops so far. Individual control methods are not very effective.

DANIELS: Approximately .25 inch moisture fell in most parts of county middle of week. Crops continued to be damaged some by winds during most of week. Late seedings of wheat seem to have the advantage on early seedings. About 40% of wheat fields have been either damaged by worms or wind. Wireworm and cutworm injury to crops has slowed down some during past week. Damaged fields, in some cases, being reseeded to feed crops. Livestock and labor situations unchanged. Sugar beet webworm moths appeared in large numbers over entire county. Grasshoppers hatching in few localities, but not in large numbers as yet.

DAWSON: Scattered showers early in week with considerable benefit in some localities. Week generally cool. Bulk of grain crops showing favorable growth and quite generally look good. Corn somewhat delayed and is not as advanced as it should be at this time. Cutworms have done damage in rather extended areas in northern portion of county, and some reseeding is being done as a result. Grass conditions remain good and livestock are in very good condition. Grasshoppers hatching in considerable numbers in quite a number of areas in county, and some control measures are being taken.

FALLON - CARTER: Precipitation .73 inch. Growing conditions excellent. Crops growing rapidly with tillering and stooling of grain crops which causes material thickening of crops, a condition not entirely satisfactory if and when hot weather prevails in July. Crop conditions excellent at present time. Livestock shows wonderful growth; grass in excellent condition.

FERGUS: Cold part of week, with .33 inch precipitation. Crops made satisfactory growth but since there is such rank growth of crops with considerable weeds in some sections, additional moisture will be needed soon in order to keep crops in their present condition. Some reports of burning before last rain. Alfalfa coming into bloom with some folks clipping with the hopes of getting a seed crop. With grass best in four years and with plenty of water, livestock in excellent condition. Some grasshoppers. Cricket control work getting satisfactory results.

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FLATHEAD: Light shower Thursday night, with good growing weather last part of week. Forage crops throughout county have suffered from lack of moisture and yields of first cutting of alfalfa in north half of county will be reduced as much as 50%. Winter wheat beginning to head. Condtion of winter wheat appears to be rather spotted, as result of dry weather for past two weeks, and heavy weed growth in some areas. Condition of spring grains generally fair throughout county. Need additional moisture very soon to keep crops growing. Condition of livestock and range good.

GALLATIN: Weather characterized by decreased temperature, with two nights of frost reported during week, heavy enough to kill beans in gardens and set back potatoes, corn and tomatoes. Irrigation of grain and hay now rather general, and particularly so in west part of county where soil moisture has decreased rapidly. First operation of summer fallow practically complete in all sections and planting completed in southern portion of county. High water continues in all streams. Range shearing under way.

GARFIELD - PETROLEUM: Scattered showers during week. Weather generally cool. Growing conditions generally good. Little change in crop conditions. Cattle condition unchanged. Sheep conditions generally with a good to excellent lamb crop complete.

GLACIER: Precipitation .21 inch, on Thursday, scattered showers throughout county all week. Considerable damage done to gardens and some wheat by frost in the middle of the week. Otherwise general growing conditions have been fair. Small amount of hail reported from northern part of county. Crop conditions generally good except for slight damage by frost in middle of week. Grain stooling heavily. Grass producing large seed crop. Livestock condition good. Shearing about to commence. Labor adequate. No mormon crickets and hoppers reported in large numbers.

HILL: Precipitation .09 inch. Ideal growing conditions throughout week. Small grains and grasses making good growth. Corn coming slowly. Cricket dusting under way with control measures effective. Grasshoppers hatching in scattered localities. Very few calls for poison as yet. Ranges in good condition. Livestock in very good condition. Surplus of labor.

JUDITH BASIN: Slight precipitation, temperatures moderate, winds moderate to severe. Winter wheat and rye heading out and looking good. Spring wheat coming along nicely but great many fields infested with pale western cutworms and wireworms. Soil blowing moderate. Moisture badly needed in some areas, and would benefit entire county. Livestock in excellent condition. Feed abundant. Much of range grasses are heading. Labor balanced.

LAKE: High winds part of week did considerable damage. No precipitation. Winter wheat starting to burn. Lower ranges getting dry. All dryland crops showing need for rain. Irrigation in full progress in all parts of county. Sugar beet thinning nearing completion. First crop of hay being harvested. Cattle and sheep being moved to summer ranges. Surplus of labor. Grasshoppers becoming numerous in some sections. Poisoning of crickets and grasshoppers in full swing.

LEWIS & CLARK - BROADWATER: No precipitation. Rather heavy winds and very cool weather during middle of week. Small amount of frost damage in Broadwater County to gardens and sugar beets. Fair growth of all crops although cool weather has slowed growth somewhat. Weeds will be somewhat of a problem in grain crops. Winter wheat coming out of boot and winter rye already headed. Summer fallow has been largely completed some time ago. Irrigation water supplies holding up well. Haying starting with most of operations directed toward harvesting cheat grass. All stock in excellent condition. Everyone remarking on comeback that grass has made and comparisons are made with 20 years ago. Insect damage of minor importance to date.

MADISON - JEFFERSON: Tuesday and Thursday very windy with some of other days cold and raw. Frozen ice in few places two nights. Winds removed a lot of soil moisture and weather was generally not favorable for good plant growth. Rain needed badly. Irrigation progressing rapidly, with some potatoes and sugar beets as well as other crops being irrigated. Some potatoes have been slow in emerging. Frosts damaged garden truck in several places Wednesday night. Some rye has headed and winter wheat is on verge of heading. Many cattle being moved onto forests. Both sheep and cattle in excellent condition with abundance of range. Distribution of grasshopper poison began this week. Hoppers very spotted and largely confined to ditch banks as yet. Equipment and poison for fighting crickets arrived during week, but crickets have spread so that poisoning is of little or no value.

MEAGHER: One light shower. Top soil becoming dry. Considerable wind. Growing conditions continue good, although top soil is becoming dry. Winter rye heading out, with splendid stands. Grass and hay splendid, although blue grass is

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beginning to turn at the ground level on the ridges. Livestock condition excellent. No wool, lamb or cattle sales reported during week. Labor supply and demand about equal. Insect control work beginning next week. Grasshopper infestations appear worse than 1937 at this date. Mormon cricket infestation somewhat larger.

MISSOULA: Cold and windy most of week. Some frost reported. No precipitation. Moisture lacking in top soil. Alfalfa developing fast. Cutting will start soon. Sugar beets growing well, good stand. Dry land grain beginning to show effect of dry weather. All crops being irrigated where water is available. Irrigation water plentiful. Strawberries will come onto market next week. Lower hill pastures beginning to dry up. Upper ranges in good condition. Livestock improving.

MUSSELSHELL - GOLDEN VALLEY: Local showers. Cool, good growing weather. Crop conditions good. Winter wheat beginning to head. Winter rye headed out in many localities. Spring grain showing up better every day. Corn coming up and making rapid growth. Livestock in good shape. Grass coming back in excellent shape.

PARK: Cold and frosty nights damaging gardens. Poor growing conditions. Crops slightly backward on account of cold weather. General crop conditions satisfactory. Warm weather needed. Grass good and livestock generally in excellent condition. Labor fairly well balanced. Grasshoppers showing up in certain localities although infestation doesn't seem as bad as last year.

PHILLIPS: Light showers mid week. Cool weather retarding crop growth. General moisture conditions still favorable. No wind damage. Practically all dry land and irrigated crops planted. Grain making good growth and stooling heavily. Corn and irrigated crops slow. Thinning and blocking of beets under way in valley. Few hoppers hatching but no damage to date. Crickets damaging alfalfa in Little Rocky area. Livestock conditions good. Range making excellent recovery. Water plentiful. Lamb and calf crops normal. Limited amount of shearing done. Surplus of labor.

PONDERA: Weather cool most of week and quite windy. Frost Monday night. Light shower Thursday. Precipitation at Conrad .16 inch. Crops did not grow rapidly due to cool weather. However, stands are excellent and much ahead of last year. Thinning and hoeing of beets in full swing. Frost damaged some garden crops, however, most of them will revive. Livestock in good condition. Shearing begun in small farm flocks and some of large flocks have started shearing operations. No marketing of wool. Labor supply adequate. Grasshoppers beginning to attach crops on edges of fields. Degree of infestation is small at present and light poisoning along edges of fields will keep them under control. No reports of large infested areas.

PRAIRIE: Weather cool with heavy downpour of rain Wednesday evening which was accompanied by some hail. No crop damage reported, and approximately .50 inch precipitation fell. Crops looking fine at present time. Wheat stooled until it is very thick and will take a large amount of moisture to bring it along for a maximum crop. Ranges green and luxuriant and will afford some wild hay if present weather conditions continue. Grasshoppers hatching in large numbers in spotted areas south of Yellowstone River. Livestock continues to improve in condition. Shearing will soon get under way. Wool very clean as there have been no dust storms in county. No activity in wool market. Supply of labor ample.

ROOSEVELT: Weather cool with general precipitation over county. Additional moisture improves crop outlook. Crops in good condition except for some continued damage to corn from cutworms in a few fields. Livestock in good condition. Range continues to make excellent growth. Grasshopper hatching scattered. Poison being mixed but little poisoning under way.

ROSEBUD: Cool, windy weather most of week. All grain crops growing rapidly. Rain needed in most localities in order that grain crops can head and fill properly. Summer fallowing discontinued because of lack of moisture in top soil. Some weedy fields of alfalfa being cut. About 80% of beets thinned. Fair to good stands reported. Livestock all in excellent condition, with abundant feed and water throughout county. Most of larger shearing plants started during week. No activity in wool or lamb sales.

SANDERS: No precipitation. Growing conditions poor on account of low temperature and lack of moisture. All crops in need of moisture except under irrigation. Damage to gardens by light frost June 10. Winter wheat headed, in fair condition but badly in need of rain. Spring rain at standstill. All hay meadows making slow growth with outlook for 70% normal first cutting. Short water supply for irrigation projects. Very heavy infestation of crickets, mostly in range areas with some crop damage. Very heavy grasshopper hatching in small scattered areas. Livestock in good condition. Grass on lower range headed out short and drying rapidly.

(Continued on Page 4.)

SHERIDAN: Approximately half inch moisture. Cool weather continues and growing conditions are favorable. Crops developing nicely in most parts of county. Worm damage serious in scattered areas. Some reseeding of wind blown fields to flax has taken place. Pastures are recovering slowly and livestock situation is favorable. No change in labor situation.

STILLWATER: No precipitation. Light frost reported Friday night insome sections. In general, crop conditions remain good but maximum growth not secured during past week because of cool weather, especially in higher elevations. A good percentage of the sugar beets have been thinned and irrigation is in progress on small grains in irrigated section. Livestock in good condition. Abundance of grass on range.

SUN RIVER PROJECT: Hard winds during week. Fields drying out rapidly. Shower Thursday, only trace of moisture. All seeding done and most crops up in good shape. Beets being thinned. Irrigation started on alfalfa. Very few grasshoppers hatched. Ample supply of labor.

SWEETGRASS: Weather still cool and cloudy. Frosts reported insome places. No precipitation. Growing conditions fair for grain and alfalfa. Gardens slow. Rye hay being harvested. Livestock gaining. Loss not so great past week from poison. Shearing under way. Cool clean, somewhat lighter in weight. Insect infestation more favorable. Late hatches of crickets and hoppers apparently persisted in storms. Earlier hatch growing slowly.

TETON: Extremely cold and windy most of week. .25 inch precipitation in eastern part of county with snow along hills in western part. Some damage due to cutworms has been reported. Grasshoppers hot hatching as yet. Range continuing to make good development and looks as though there will be a considerable amount of native grass seed this year. Seeding practically completed on irrigated land. Some shearing getting under way. Cold weather has delayed operations.

TOOLE: Light frosts first of week. .22 inch rainfall at Shelby. Frosts did small damage in gardens but no apparent damage to other crops. Seeding practically completed and most operators hurrying to get their summer fallowing done as soon as possible. Wheat seedings are very heavy due to cool May and moisture conditions. All crops in excellent shape at present time with little wireworm damage. In most cases wireworms have thinned out the fields but with a heavy growth there is still sufficient to bring on a crop. Rains of the week helped continue grass growth. Range in excellent shape, earlier grasses heading out and a grass crop is assured for this year. Many are looking forward to cutting hay this year in places where it has not been cut in past years. Labor plentiful.

VALLEY: Light showers throughout most of county Wednesday night. Three days of high winds. Most of crops are looking good. A few show signs of burning. Some crops have been damaged by winds. Very little damage to crops by insects as yet.

WHEATLAND: Cold and cloudy with winds. Heavy frost damaged gardens. Growing conditions not as good, with drying winds and cool temperatures, Shearing has started.

WIBAUX: Weather cool. Growing conditions good for grain. Precipitation .07 to .56 inches reported fromdifferent sections of county. Some cutworm damage reported and numerous grasshoppers are reported hatching, but outbreak seems to be spotted so far, and mostly in vacant land, along fence rows, and parts of range is very badly affected. Some poisoning started this week, and will be infull swing next week. Good lamb crop reported, also good calf crop. Ranges in excellent condition.

YELLOWSTONE: Weather cool and cloudy most of week with some wind. No precipitation. Crops making good growth. Winter wheat headed out and some spring wheat on irrigated land. Thinning and blocking about completed and beets looking excellent. Haying started in irrigated areas and considerable cheat grass being cut for hay on dry land areas. Oiling starting on Huntley Project for control of crickets. 61 miles of tin barrier in operation, and 82 miles of oil barrier. Crickets under control to date. Livestock in good condition. Surplus of labor.

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Jay G. Diamond, Sr. Agr. Statistician.
T. J. Kuzelka, Jr. Agr. Statistician.

Helena, Montana
June 14, 1938

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics —— Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, June 21, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Federal Office Building, Helena, Montana.

Warmer temperatures and moderateto heavy showers improved growing conditions in most sections of the State during the week ending Tuesday, June 21st. In a few districts, notably in parts of Big Horn, Dawson, Lake, Valley, Prairie, Rosebud, and Wibaux Counties, showers were too light to be of real benefit, and crops and ranges commenced suffering or continued to decline and in need of immediate good rains. Hail, and washing of soils as the result of some heavy showers, caused some crop damage in some localities.

Progress was made with haying, summer-fallowing, sheep shearing, irrigation, and cultivation of row crops, although showers were unfavorable for curing and stacking of hay, while lack of moisture in some extreme eastern districts necessitated cessation of summer-fallowing.

The condition of small grains and other crops on dry-lands has been largely improved as a result of the past week's precipitation, although considerable damage was done in a few places by burning before the moisture arrived. Irrigated crops continue doing very well, with generally ample water supplies. Although winter wheat has been damaged as much as 20% by drouth in a few districts and to a small degree by last week's frosts in a few scattered areas, the condition of the crop as a whole remains good to excellent with moisture now largely adequate for filling needs. Winter wheat is headed out in many parts of the State, and rye is reported ripening in the Yellowstone Valley. Considerable rye hay has been cut and stacked. Spring wheat and barley are reported heading in Flathead, Golden Valley, and Musselshell Counties. Beets are coming along nicely with thinning nearly completed. Hail caused considerable damage to beets in Big Horn County. Potatoes and beans are recovering from last week's frosts, and corn and gardens have made faster and more satisfactory growth with the warmer temperatures. Peas are in full bloom in Lake County. Marketing of strawberries continued from western districts.

Rains helped ranges and pastures, although a few areas missed, continued in need of moisture. Early varieties of range grasses have begun to mature. Feed and water remain ample for all livestock needs.

Livestock are reported in the best of condition, or continuing to improve. Cattle have been largely moved to summer range, while sheep are being moved as rapidly as shearing can be completed. Shearing is well along, or has been completed except in the usually later and more elevated regions.

In connection with the past situation, cutworm damage is reported to have appreciably lessened in most districts. Grasshoppers are continuing to hatch, but of yet have been of little consequence. The cricket situation is little changed, with some winter wheat being damaged in the southeast.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING JUNE 21, 1938

Station	Temperature Highest	Temperature Lowest	Sunshine % Of Possible	Total Precipitation This Week	Total Precipitation From April 1st to date	Total Precipitation For Corresponding Period in 1937
Billings	89	51	*	0.37	6.62	6.18
Bozeman	77	39	*	0.23	7.64	7.13
Conrad	*	*	*	1.04	5.26	4.67
Cut Bank	84	45	*	0.45	5.81	5.57
Fort Peck	94	52	*	0.20	2.28	2.98
Glendive	99	51	*	0.08	2.74	3.78
Great Falls	84	46	*	1.47	6.12	3.57
Havre	90	50	74	1.05	3.96	4.52
HELENA	83	47	63	1.43	5.83	3.13
Kalispell	82	40	54	0.58	2.78	4.21
Lewistown	85	38	*	1.23	4.82	4.47
Malta	91	50	*	0.94	5.33	5.09
Miles City	96	54	70	0.10	4.69	3.60
Missoula	84	46	52	1.66	5.20	2.81
Poplar	96	49	*	0.63	3.20	1.19
Stanford	*	*	*	2.21	7.61	3.56
AVERAGE	--	--	--	0.85	4.99	4.15

* No Data.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bureau of Agri. Economics.

Series - 1938 - No. 12
Helena, Montana
June 22, 1938

The following county summaries of crop conditions for the week ending June 13, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Rains throughout county during past week; temperature warmer. Growing conditions good with plenty of moisture and warmer temperatures; crops good. Shearing underway; good to fair lamb crop.

BIG HORN: Growing conditions have declined during the week with warmer and drier weather. A few scattered showers accompanied by hail which did some damage fell during the week. Otherwise crops are in need of rain to come up to earlier expectations. Winter wheat is suffering in some places from lack of moisture. About 700 acres of beets, north of Hardin, were damaged by hail, 50% of which will recover with an uneven stand. Some early grain was damaged, also hay, beans, and corn. Haying in all parts of the county. Beet thinning is 80% done. A large amount of wild hay is being put up. Cattle are in the best of condition. Mormon crickets are still threatening and control measures are being intensified.

BLAINE: Local light showers during fore part of week with a general rain Friday evening. Most of the week we have had sunshiny days with moderate temperatures. Growing conditions excellent. All crops showing excellent growth with a very heavy stand of grain due to the heavy stooling which will require considerable moisture from now on to mature the crops. Some poisoning of Mormon crickets being done in the extreme south end of the county. No grasshopper damage as yet. Beet thinning about completed. Livestock in excellent condition. Range is in excellent condition.

CARBON: Heavy rains reported on Monday in Bridger and Belfry sections and in the western portion of the county. Heavy hail reported in the Red Lodge section which did some damage to gardens but was not very destructive to crops. Dry land crops in need of rain and moisture because of the fact that it stooled very heavily in the spring. Practically all winter grain headed out and all early spring grain is making a very substantial growth. The greater portion of alfalfa has been cut and some stacking is in progress. Beet fields are showing up very well. Corn and bean cultivation in progress. The cricket situation has developed in the vicinity of Joliet and in the northwestern portion of the county where tin barriers and dusting have been very effective. Crickets are showing up more heavily in the eastern portion of the county than was expected. Grasshopper bait has been used in a limited way with prospects of a greater use still to come. Livestock in excellent condition.

CASCADE: More than 1 inch of rain fell during the past week, to forestall any possibility of damage to crops from drouth. .73 of this precipitation came Friday afternoon, accompanied by high winds and some hail. No crop damage has been reported thus far from hail, but it is felt that some areas may have suffered from washing and sheet erosion. Slight damage to winter and spring wheat and also to gardens, has been reported from frosts, which occurred the night of June 10. There is a possibility that some winter wheat which was headed out at that time may suffer from this cause. However, such damage will in all probability be light. Aside from possible damage from flood and frost, all crops are making excellent progress. Sugar beet thinning is about 90% completed with much better than normal stands reported and ample water for all irrigated crops. No damage being sustained from Mormon crickets as crews are able to hold them in check. No grasshopper damage reported to date. Livestock in excellent condition. Surplus of labor.

CHOUTEAU: Light showers in Waltham to Square Butte areas. Several hot days. Winter wheat in most areas excellent with some damage from frost and drouth. Spring wheat showing the effects of dry weather. Feed crops excellent with haying in full swing. Livestock in excellent condition. Some increase in the demand for labor. Mormon cricket control continues with fences being set up and power and hand dusters in use. Movement especially heavy in Square Butte and Shonkin Communities.

CUSTER - POWDER RIVER: Generally warm with heavy showers scattered over most of area. Growing conditions good. Showers of cloudburst proportions in Miles City area, Tuesday. Irrigated crops excellent with alfalfa nearly ready to cut. Beet thinning about completed. Winter grains on dryland good with wheat heading. Rye maturing nicely. Spring grains have made good growth but further rains necessary to assure them. Grass the best in years. Early varieties maturing. All stock in good condition. Harvest of wild hay starting in Powder River County. Crickets moving eastward on Powder River in vicinity of Broadus. Damage to crops not generally noticeable.

DANIELS: Rain varying from one-fourth inch precipitation to one inch fell in the northern and western part of the county during the fore part of the week. Growing conditions excellent with considerable warmer weather and very little wind. Late seeded crops coming on in excellent shape and early seeded fields, where protected by wind, are showing good growth. Worm damage let up considerably. Considerable summer-fallowing being done. Livestock in good shape and pasture growth very favorable. Labor situation unchanged. Bait mixing operations for grasshopper

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control started. Serious hopper infestation expected in southeast corner of county. Small hoppers hatching in large numbers in this area.

DAWSON: Weather hot and dry, with some wind toward the latter part of the week. Crops are beginning to burn, and moisture is needed quite badly. Livestock are looking well yet, and water supply is ample, although the grass is burning. Grasshoppers are hatching in large numbers, but to this time there has not been reported much damage to crops by them. Cutworms continue to do considerable damage to garden truck.

FALLON - CARTER: Precipitation .62 inch. Reasonably cool weather with two or three warm days. Crop conditions excellent at the present date. All spring grains are up nicely and growing rapidly. Winter wheat and rye practically all headed. With the warm weather numerous reports of large numbers of grasshoppers have come in, but to date no damage has been reported. Range and pasture in excellent condition, livestock showing wonderful gains.

FLATHEAD: The first part of the week verywindy. On Thursday, general rain throughout the county. Growing conditions had been poor up tunil Thursday's rain. The high winds and warm weather had reduced the soil moisture very materially and alfalfa was turning brown throughout the county. Winter wheat was burning in parts of the county and heading up short. Spring grains throughout most of the county were in fair condition, but in some areas, were turning brown very noticeably before the rain.

The rainfall on Thursday was sufficient to be of temporary relief, but more moisture is needed badly. Early seeded spring barley and spring wheat are beginning to head out. Vegetable and fruit crops are generally very good in the county. Some increase has occurred in the strawberry acreage and the production will be big, as compared to the last few years. Livestock in excellent condition. Feed abundant.

GALLATIN: Cool weather, with intermittent showers, especially in Eastern portion of county. Hail storm in Upper Dry Creek area Friday. Soil moisture decreasing rapidly in Western end of county. Some irrigating being done in all irrigated sections of county. Grasshopper poisoning started in one community. Crickets being kept under control. Range shearing nearly completed.

GARFIELD - PETROLEUM: Few scattered showers. Weather cool first part of week, warmer during last part. Growing conditions good. Local cut worm damage still reported. All except late feed crops and corn seeding is complete. Little change in livestock situation fromprevious report.

GLACIER: Scattered showers throughout the county all week with few indications of snow, otherwise general growing conditions very good. Winter wheat in the boot, some will be headed in a few days. Spring grains growing exceptionally well. Soil moisture conditions excellent. Native hay meadows and alfalfa exceptionally good. Livestock in excellent shape, shearing commenced last week. Labor, adequate. A few reports of hoppers in the southeastern portion of the county; however, these are not appearing in serious proportions.

HILL: Precipitation for the past week .47 inches. The two hot days during the past week started burning of wheat on spring plowed and disced in ground. The rain of last night and cooler weather have temporarily relieved the situation. Ranges are browning up to a considerable extent and soil moisture rather deficient. Range in good condition. Livestock in good condition. A surplus of labor. Very few calls for grasshopper poison to date. Good results have been obtained from dusting crickets in infested areas.

JUDITH BASIN: Precipitation slight and scattered. Temperatures moderate to high. Growing conditions unchanged. Moisture badly needed in the eastern half of the county. Wheat burning and crop outlook poor insome commnuities. Heavy frosts during the past week apparently have done some damage in certain localities. Western portion of the county mostly in good shape yet. Pale Western cutworms doing considerable damage throughout the county. Cricket infestation threatens crops in northwestern portion of the county. Grasshoppers appear to be of no consequence this season. Livestock on the range and mostly in good shape. Feed plentiful. Sheep shearing well underway. Grass forming seed. With the light stocking of the range and good growing conditions for grass, the outlook for range improvement is good. Labor situation, balanced.

LAKE: Few scattered showers did little good. Dryland crops burning. Considerable more wind than usual. Haying in full swing. Summer fallowing about completed. Peas in full bloom. Livestock in good condition. Grasshoppers hatching in alarming numbers. Crickets are migrating but are being held in check from doing any material damage.

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LEWIS & CLARK - BROADWATER: Considerable cool weather, scattered frost damage. Precipitation came at the right time to meet crop needs. Everything generally continuing favorable. Yields should average higher than for several years. Summer fallow receiving careful cultivation because of increased weed growth. Rye being cut for hay, alfalfa cutting starting. Shearing well along. All stock making good gains. Grass unusually good. Insects no problem to date.

MADISON - JEFFERSON: Sunday, local showers, with a good rain in the vicinity of Whitehall on Monday. Drenching rains also fell Wednesday evening. Growing conditions gretaly improved over previous week because of moisture and warmer weather with very little wind. A trace of hail fell in Wednesday's showers. Crops improved in the areas where moisture fell with additional moisture still being needed. Irrigation being pushed on hay, grain, potato and beet fields with most of the crops looking very good. Several farmers and stockmen are fighting grasshoppers which are apparently confined at the present time to small areas along ditch banks and in stubble fields. Sheep shearing is progressing rapidly with fairly heavy fleeces being reported. Several sheepmen believe their wool to be lighter shrinking than in previous years. A few cattle still being moved to the forest with a large number of sheep ready to be moved onto the reserve as soon as shearing is completed.

MEAGHER: Showers. Wind. Net result that soil moisture a little improved; irrigation water continues plentiful for present. Growing conditions good. Grain looking fine. Grain heading out early andformer drying temporarily halted. Livestock condition continues excellent. No activity on wool, lamb, or cattle sales. Labor demand barely ahead of supply. Insect control operations beginning this week. Hatching at higher altitudes barely completed.

MISSOULA: Cool and cloudy most of week. Several good showers. Probably one inch of rain. Some haying started but farmers generally waiting for weather to clear. All crops growing well. Strawberry crop coming on market. Moisture situation much improved in most localities. Ranges and pastures improved by rains, Labor situation balanced.

MUSSELSHELL - GOLDEN VALLEY: Heavy local showers. About 3/4 inch precipitation. Weather cool first part of week. Warmer during last part. Some damage done by frost Monday night to the winter wheat in the Big Coulee area. Otherwise, crop conditions are excellent. Spring grain is beginning to head. Rye and winter wheat headed out in many localities. Livestock are the fattest they have been on the range since 1927. Plenty of grass everywhere. In some places range is being mowed for hay. Shearing in full swing. Will be completed about the end of the month. Wool crop very good.

PARK: Showers with good rain June 18th. Moisture coming at ideal time for all crops as grain was beginning to burn. Crop prospects brightened by rain. A few farmers had begun cutting first crop alfalfa,but very little down. Most farmers have been irrigating grain. Summer fallowing about 3/4 completed. Livestock in good condition. Few clips wool sold 18-20¢. Many growers considering C.C.C. loan. Few men hunting jobs. Spotted hopper hatchings occurring. Cricket dusting continuing.

PHILLIPS: Heavy local showers in most sections of county. 1.21 inches rain recorded at Malta. Reports vary from .20 to 1.75 inches throughout the county. Warmer weather - more favorable growing conditions. Most dryland crops making good growth as a result of the warmer weather and sufficient moisture in all but Northeast part of county. Sugar beet thinning and blocking well underway. No serious grasshopper outbreaks. Crickets doing considerable damage in infested areas. Livestock conditions good. Range in best condition for years. Shearing underway. Surplus of labor.

PONDERA: Growing conditions were much more favorable during the week with precipitation on Friday amounting to .59 inches. All crops are looking good and making fine progress. Beet stands are excellent. The grains have stooled so much that it will take a great deal of moisture to carry them to maturity. Weed control program underway. Livestock are doing well. Labor supply is plentiful. No damage from grasshoppers,and other insects have ceased to be very effective in damaging any crops.

PRAIRIE: A shower fell on a narrow strip along the Yellowstone River Tuesday, leaving approximately half an inch of moisture. Crops need more moisture and in many places the crops are burning. Grasshopper campaign well underway with the setting up of a WPA bait mixing station. Bait is going out quite rapidly. Livestock continues to improve in condition. Nose flies bothering horses. No activity in the wool market.

RICHLAND: No precipitation during week. Weather considerably warmer than experienced before this spring. Dryland crops in good condition but badly

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in need of a rain. Moisture conditions in irrigated territory still fairly good and the only irrigation being done is on alfalfa. Thinning of beets has been started. Grasshoppers hatching out in the dryland portion of the county in quite large numbers so that it has been necessary to start the poisoning campaign in the western part of the county. Cutworms have done considerable damage to the corn crop. Labor is plentiful.

ROOSEVELT: Temperatures higher past week. No precipitation. Good growing conditions but additional moisture needed soon. Damage from worms about through, with scatter fields over most of county showing some damage. Livestock situation unchanged. Grasshoppers present over most of the county but infestation is spotted. Considerable poison being used to protect crops. No crop damage reported.

ROSEBUD: Scattered local showers during week of material benefit in some areas. Hail reported in two small areas. Winter wheat beginning to suffer from lack of moisture. Yield in some areas affected. Spring wheat will need considerable additional moisture to make a crop. Conditions continue to be exceptionally favorable for livestock. Shearing practically completed. A few hopper appearing, but no damage reported.

SANDERS: Precipitation .81; temperatures - maximum 80, minimum 49. Good rains in all parts of the county relieving serious drouth conditions. Backward growing conditions from cool cloudy weather. Winter wheat much improved by rains but crop will be short from damage by extreme dry conditions. Spring grains very backward. Harvesting first cutting hay started but being delayed by rain. Gardens very backward. Livestock in good condition. Range grasses badly dried out but improved by present rains. Cricket control continues with small damage to farm crops. Some heavy grasshopper outbreaks in small areas.

SHERIDAN: A sharp rise in temperature occurred during the latter part of the week. Lighter showers have fallen in parts of the county. In general, growing conditions are quite favorable. A lack of moisture is becoming apparent in parts of thecounty. Grasshopper outbreaks have occurred in scattered areas. Livestock conditions continue good. No change in labor situation. Grasshopper bait spreading campaign is active in certain parts of the county.

STILLWATER: The weather was generally cool during the past week with a few local showers. Generally favorable for crop growth. A total of 20 hundredths of an inch precipitation received during the week at Columbus. Crop conditions continue favorable although additional moisture would be helpful at this time. Winter rye has all headed out. Winter wheat beginning to head. A good many grain fields are very weedy with an abundance of fan weed showing up. First cutting of alfalfa being cut. Summer fallow operations in full swing. Cricket control operations continue with good results. Crickets beginning to migrate. Some grasshoppers hatching but not in damaging numbers. Some wild hay being put up. All livestock in good condition with range grass in excellent condition. Shearing started in several sections of the county. Some surplus of labor but with haying operations starting the surplus will decrease.

SUN RIVER PROJECT: Light showers throughout the week. Total of 1.03 inches for the month of June. Good stands of all crops secured. Good stands of sugar beets reported and thinning well along. Grasshoppers hatching in a few places. No large numbers as yet.

SWEETGRASS: Weather conditions have been cool and showery. Precipitation 1.18. General growing conditions have been better the past week, as the weather has been somewhat warmer. Crop conditions are fine. Crops growing rapidly. Irrigation in full swing. Rye hay in stack. Considerable alfalfa being cut for hay. Livestock doing nicely on pasture and range.

TETON: 1.49 inches of rain, a total for Sunday, Monday and Friday of this week. The rain the first part of the week, consisting of .89 covered less than 3/4 of the county, however, the rain on Friday was general over the county with the heaviest possibly falling in the southern half of the county. It is quite generally agreed that the moisture has wet down practically to the subsoil moisture. The stands of grains are so thick this year that it will require considerable moisture to properly fill the crop. Growing conditions this week have been ideal. The winter wheat crop has plenty of moisture now to fill properly.

The range is considered the best it has been in many years. Shearing is getting started. Most growers are inclined to take advantage of the C.C.C. loans which is practically on a par with prices offered by buyers. Livestock are in the best of condition due to the abundance of range.

TOOLE: Weather has been warm with no winds. Shower received Friday that averaged around .36 inches. Some damage being done by cut worms and wire-worms. Crops coming along nicely, and more rains would be beneficial at the present time.

(Continued on Page 5.)

because of the heavy stands of wheat and other crops. Weeds are also a problem in some areas and continued moisture is needed. Winter wheat is in excellent shape, and the crops are practically assured at the present time. The same is true of fall rye. Ranges remain in excellent shape. More wild hay will be cut this year than in a good many previous years.

VALLEY: The past week was characterized with a variation from hot winds to cool weather. The western and northern portion of the county received a good general rain varying from one-half to one inch. Crops inthe northern portion of the county are looking good and not suffering at all from lack of moisture to date. Some insect infestation causing slight damage. Insects are cutworms and grasshoppers which are just hatching in a few localities. Southern portion of the county the crops are badly in need of moisture, some fields burning badly. Very little insect damage done to date in southern portion. Some corn and millets being seeded this week, for feed purposes. Sugar beets looking fair to good. Grass throughout thecounty is very good but shows the effect of dry weather in southern half of the county. Most farm flocks have been sheared and large operators are getting underway in shearing. Livestock taking on weight and look, for the most part, in excellent condition at this time.

MEDAUX: Precipitation south-third of county .25 of an inch. Crops burning in northern two-thirds of the county. Crop prospects way down from week ago. Some early seeded grain heading out short. Grasshoppers had in places. Poisoning campaign in full swing. 50,000 pounds of bait put out during the week with excellent results. The corn crop in good condition at present, also ranges.. Crested wheatgrass in good condition and heading out. A large number of good stands in the county. Sheep shearing general. Quality of wool better than last year according to reports.

YELLOWSTONE: Precipitation 1.67. Hot with frequent showers and one heavy rain. Also, small areas where considerable hail damage done, particularly south of Laurel and on the Hopper Lane. All irrigated and dryland crops ahead of schedule and looking excellent. Considerable hay down during rainy spell, and winter rye ripening rapidly. Livestock in excellent condition. Surplus of labor. Crickets being held out of all irrigated areas with oil and tin. Power dusters and tin barrier being used extensively in dryland areas south of the river, but considerable damage to winter wheat; especially on heads of grain.

WHEATLAND: Later part of week cool and damp with intermittent showers. Moisture has been a big help to crops. Some hail in central part of county damaged crops slightly. Grasshoppers are beginning to hatch particularly in the southern portion of the county. Shearing well balanced.

FERGUS: Total of .69 inch of rain for the week. The wheat, both winter and spring, has been damaged to some extent by drouth in practically all parts of the county and indications are that heavy freezing on the morning of June 10 may have been sufficient to have some effect on wheat. The alfalfa crop was quite badly damaged all the way from Lewistown to Denton and some damage reported in most all parts of the county. Crop prospects have probably been reduced 25% the county over during the last 10 days. Showers hitting some sports during the week have helped some crops and a general rain amounting to a quarter to three quarters of an inch on Friday evening of this week will stop damage. Livestock making very good gains with grass and water in all parts of the county. Cricket control work satisfactory. Grasshoppers poisoning beginning with some slight crop damage reported. Grasshoppers just in spots.

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Jay G. Diamond, Sr. Agr. Statistician.
T. J. Kuzelka, Jr. Agr. Statistician.

Helena, Montana
June 21, 1938

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics —— Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, June 28, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.
Offices: Federal Office Building, Helena, Montana.

The weather for the week was characterized by unsettled, cloudy conditions, and frequent showers, many of which were of excessive proportions that caused some loss of life and property from local flooding. Hailstorms added to damage done by washing and flooding of crop lands, and were of particular severity in several southern counties. Temperatures averaged above normal, although there was little excessive heat except in the east the first two days. Cloudy skies and smoke reduced sunshine to less than half the possible amount, and were helpful in preventing rapid evaporation and baking of surface soils in flooded areas. It was the wettest week of the present growing season. Only four stations reported less than one inch of precipitation. The average for the State as a whole, based on the records of 16 reporting stations, for the first three months, April to June, is 2.50 inches greater than the average for the corresponding period in 1937. At Billings, Great Falls, Helena, Missoula, and Stanford, the total precipitation since April 1 this year is already greater than occurred during the entire period from April to September, 1937.

Losses to crops from hail and flooding were insignificant compared with the material benefit from the heavy rainfall, which reached all districts except a few in Flathead, Prairie, Rosebud, and Powder River Counties. Reports indicated generally excellent growing conditions again for crops and ranges throughout the State. Much of the winter wheat and spring grains, which had begun to suffer from early-June drouth, was reported revived and in an improved condition. Some permanent damage, estimated between 20 to 50%, however, occurred in Flathead and Dawson County, before the rains arrived. Winter wheat is largely headed out. Spring grains are jointing, and early-sown spring wheat and barley are heading. Sufficient moisture is available in soils for carrying spring grains well along towards maturity. Rye is ripening, or being cut for hay. Corn did not grow so fast this week, but good progress was reported with potatoes, beets, and peas. Strawberries were damaged some, and harvest was delayed by the rains. It was too wet for summer-fallowing at times. Summer-fallow ground is generally in well moistened condition, and in excellent shape for seeding next season's winter wheat crop except for getting rid of weeds.

Alfalfa and other tame grasses are reported in excellent condition. New seedings have made a fine start. The rains delayed haying, and damaged considerable unstacked hay. Ranges are in fine condition, and prospects for an adequate supply of winter feed and an increased stand of range grass next season are excellent. Livestock are in splendid condition, and early marketing is anticipated. A few losses occurred from local floods. Little or no restocking of the range has occurred this season, although water and grass have been unusually plentiful compared with recent drouth years. There is still some shearing to be finished, as operations were held up much of the week by heavy rains.

Rains and poisoning operations held crickets and grasshoppers well in check, but a heavy flight of sugar beet webworm moths indicate trouble soon from that source.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING JUNE 28, 1938

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Total Precipitation This Week	Total Precipitation From April 1st to date	Total Precipitation For Corresponding Period in 1937
Billings	85	53	*	3.09	9.71	6.18
Bozeman	78	47	*	0.92	8.56	7.13
Conrad	*	*	*	1.53	6.79	4.87
Cut Bank	78	45	*	2.50	8.31	5.57
Fort Peck	87	51	*	2.07	4.35	2.98
Glendive	97	49	*	1.58	4.32	3.78
Great Falls	76	52	*	2.37	8.49	3.69
Havre	82	58	40	2.37	6.33	4.55
HELENA	79	50	30	1.55	7.38	3.83
Kalispell	80	50	68	0.41	3.19	4.47
Lewistown	81	47	*	3.41	8.23	4.47
Malta	84	51	*	0.84	6.17	5.20
Miles City	94	58	44	0.73	5.42	3.60
Missoula	86	52	48	1.34	6.54	2.98
Poplar	91	48	*	1.35	4.55	1.33
Stanford	*	*	*	1.53	9.14	3.56
Average				1.72	6.72	4.22

*No Data.

Series - 1938 - No. 13
Helena, Montana
June 29, 1938

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bureau of Agri. Economics

The following county summaries of crop conditions for the week ending June 25, 1938. are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Rained over county in general during past week; some sections had cloudbursts and hail; temperature cooler. Plenty of moisture for good growing conditions. Generally, crops look good; few crops damaged slightly by hail. Shearing practically completed; livestock in good condition.

BIG HORN: Growing conditions improved greatly by heavy showers and general rains during the latter part of the week. Showers approached cloudburst and flood proportions in some places of the county. Destructive hail storms have occurred northwest of Hardin doing heavy damage to alfalfa fields, beets and other crops in the valley causing a large abandonment of beet acres which is being reseeded to barley and oats and other feed crops. Thinning of beets practically completed. The heavy rains taking the place of irrigation. Haying delayed by rains. Prospects have improved materially for grain yields and range in splendid condition with grass ripening and reseeding of much depleted range land.

Cattle in splendid condition and early marketing of market cattle anticipated. Crickets are still menacing and have been checked by control measures and the recent heavy rainfall. Grasshoppers were reported in parts of the county and will probably do considerable damage to the second crop of alfalfa.

BLAINE: Approximately 4 inches of moisture fell in this county during the past week. Reports of cloudbursts in several sections. Reports of 28 bridges being washed out. Rain was accompanied by severe hail storm in the Bear Paw Mountain section which did considerable damage over a small area. Since the heavy rain Wednesday night, the weather has been cool and cloudy which has prevented considerable crop damage which otherwise would have taken place. It is difficult to say at this time just how much damage has been done to crops which will depend to a large extent how soon the water can be drained off the fields which are now covered. Weather conditions in the next few days will also go to influence the amount of crop damage. Fields on dry land areas were damaged by washing but not seriously. Crops on the bench lands are showing excellent growth and look exceptionally good at this time. Crops in the valley are very good but it is expected that there will be some damage from flooding. Livestock and range in excellent condition. Shearing got started last week but has been delayed on account of wet weather.

CARBON: Weather cool and cloudy most of the week with heavy rains reported over the entire county with cloudbursts and hail in the 5-mile section east of Edgar and some damage was reported to crops. Most hay crops have been harvested but few have been stacked. Crops never looked better. Range grasses ripening seed, stock in best of condition. Stock numbers are very small in comparison to the available grass this season.

CASCADE: Cool, cloudy and rainy characterized the weather for the past week. 3.46 inches of precipitation fell, some in cloudburst proportions, during the week, doing only slight damage by flooding fields in restricted areas. This additional moisture insures a good winter wheat yield and practically insures a spring wheat crop. Summer-fallow in best condition in a decade for the seeding of winter wheat for the 1939 crop. All farm operations have been at a standstill during the past week because of weather. Some hay that was out early has been damaged considerably, but the benefits to crops far out balance any damage that might have resulted from the rains. Livestock in excellent condition. Surplus of labor. No insect damage reported. Crickets under control.

CUSTER - POWDER RIVER: First half of week featured by high temperatures. Last half extremely cool and cloudy for this season with some light scattered showers. Heavy rain in northeastern Custer County Saturday night, June 18. Dry land crops in northern and eastern Custer County well advanced because of adequate rainfall recently. Winter wheat practically assured with spring wheat heading. South country to Powder River County area needing moisture to guarantee dry land crops. First crop of alfalfa under irrigation now going in the stack. Yields good. Dry land rye being cut for hay, also with good yields. Range and livestock conditions remain excellent. No restocking reported.

DANIELS: Approximately 1.45 inches of precipitation fell over most of the county during the past week. Growing conditions good fore part of week, but generally poor latter part because of cold and cloudy weather. Early seeded grain is now heading out. Late seeded crops have made excellent growth during the past few days because of ample moisture and good growing conditions. Livestock is in good shape and pasture growth should improve due to recent rains. Labor situation unchanged. Grasshoppers appearing in most parts of the county, and some poisoning done fore part of week. Blister beetles and webworms are beginning to appear. No damage reported as yet.

DAWSON: Weather cool, with growing conditions good. Three good rains received during the week, with a total of 2.53 inches precipitation. Reports would

(Continued on Page 2.)

indicate that in the southeast portion of the county crops are about 50% damaged by drouth, and in the balance of the county about 20% damaged. Spring wheat is heading out, but is short. Winter wheat is beginning to fill. Grass is good, and stock are in good shape with plenty of water. Reportswould indicate that grasshoppers are hatching in pretty large numbers in the southeast corner, the south end, and in the Bloomfield district, although there seems to be not much damage done as yet.

FALLON - CARTER: 2.15 inches precipitation this past week. Intensity of showers varied throughout the counties. Degrees of variation run from one-half to two and a half inches. Crop conditions good. Some grasshopper damage reported. Much grasshopper poison being distributed through the Extension office. Livestock conditions excellent. Shearing completed in most localities with a few bands to be sheared this next week. Wool has been shearing very clean indicating light shrinkage. Grass excellent. Haying operations starting next week. Much wild hay available.

FERGUS: Precipitation 3.57 inches this month with 2.01 inches falling this week. With over two inches of rain during the week damage which was becoming very evident from both frost and drouth has been checked. Some damage due to hail to few farms scattered throughout the county. Few crops damaged by floods. General effect, moisture has been very beneficial. With grass already heading out and some folks say the best in several years, additional moisture will assure heavy seed crop an dpossibilities of very rapid recovery of stands lost last year from drouth. Good grass and plenty of water for the livestock. Livestock in probably the best condition they have been at any time during the past five years. Cricket control work completed in Gilt Edge community with very satisfactory control. Grasshoppers spotted. No damage reported.

FLATHEAD: One-half inch of rainfall general over the county the first part of the week. Local showers in parts of the county during the week. Days cool with very little wind. Despite some rainfall during the week, crops are suffering materially from lack of moisture. The subsoil moisture is apparently all gone and the light rains during the past week were not sufficient to result in any improvement in growing conditions. Nearly all winter wheat is tip-burned; some fields 50% or more damaged. Spring grain burning in communities west of the Flathead River. Alfalfa crop very short. No insect damage to date, however, a serious outbreak of sugar beet webworm is expected in a week or ten days due to a very heavy flight of moths throughout the county during the past week. Condition of the range and livestock remains good.

GALLATIN: Cool weather, with heavy rain storms and wind during the week. Bad hail storm on Wednesday, covering large area of county, from the southwest to the northwest. Crop conditions excellent except for large area damaged considerably by hail fore part of the week. Canning and seed peas blooming. Fall grain practically all headed and spring grain coming into the boot. Grasshopper poisoning continues in Amsterdam territory. Some shearing still being done. Range conditions best they have been in years.

GARFIELD - PETROLEUM: Precipitation received generally with severe cloudbursts in scattered areas. Small area of hail in easter Petroleum County. Hot sultry temperatures cooled at the end of the period. Crop conditions good except in Jordan area and southeastern Garfield County. Moisture during the week has improved all crop conditions. Winter wheat is heading. Rye being harbested for hay. Early spring grains heading. Corn generally has made little growth since planting. Range conditions good in all except southeastern Garfield County. All livestock in good to excellent condtion in most areas having sufficient pasture to complete the season. Shearing 75% completed with slight sheep loss following shearing due to storms.

GLACIER: General growing conditions good. Soil moisture conditions excellent. Rain every day this week with showers approaching cloudburst proportions in the vicinity of Cut Bank Thursday night. Crop conditions excellent. Winter wheat showing a few scattered heads headed out. Summerfallowing delayed because of continued rains and weed situations in some places are becoming critical. Prairies and native hay meadows have abundant grass. Native grass producing heavier crop of seed, and there will be adequate pasture and winter feed for more stock than are at present in the county. Grain farmers of the northern part of the county apprehensive of frost damage, should this rainy weather keep up. Alfalfa and other tame grasses in excellent condition. New seedings of grasses in excellent condition. Livestock in excellent shape. Shearing held up because of rain. Labor situation, satisfactory. Few reports of hoppers and some poisoning done in the area southwest of Cut Bank along the Marias breaks.

HILL: 2.63 inches precipitation for the past week. Some reports are to the effect that there were 3 to 3½ inches of precipitation in other sections of the county. Flood through one coulee southeast of Laredo washed all buildings off from six farms. The hail over a small area southeast of Havre damaged crops to a considerable extent but anticipate that these crops were not far enough along so

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that th[illegible] have received permanent damage. No report of stock losses due to floods. Majority of the county reports crops in excellent conditions with an abundance of moisture. Ranges are in good condition. Livestock in good condition. Surplus of labor.

JUDITH BASIN: Precipitation so far in June two and ninety-eight hundredths inches. High proportion of June precipitation has fallen the past week. Temperatures moderate. Hail light to destructive, hitting farms in scattered areas throughout the county. Cloudy most of past week. Recent rains have improved soil moisture conditions in the eastern half of thecounty considerably the past week. Soil moisture excellent in west portion of the county with excellent prospects for bumpercrop. Worms have done considerable damage throughout entire county. Grasshoppers have not appeared as yet. Feedconditions on the range are excellent. Stock in good shape. Shearing well along. Labor situation, balanced.

LAKE: From 1½ to 2¼ inches of rain has fallen during the past week. Some hail in scattered sections but no damage reported. Entire week cloudy and cool. Storms have causedsome damage to hay which was ready to be hauled. All crops making rapied growth. Pea crop looking best in several years. Winter grain which had started to burn is now making good growth. Spring grain is heading. Winter rye is starting to ripen. Labor situation, balanced. Crickets are being held under control. Grasshoppers hatching in large numbers. Farmers are ready to poison hoppers when weather conditions become satisfactory.

LEWIS & CLARK - BROADWATER: Rain and cloudy all week with relatively slow growing conditions. Rain was needed and will improve future crop conditions. Growth of crops slowed up due to rain and cloudy weather. Considerable hay will be damaged somewhat by rains of past week. Some crops damaged due to excessive run-off of water. Prospects for all crops--generally excellent. Weather conditions have slowed up summerfallow cultivation temporarily. Wool clips average heavy and clean. Majority of shearing completed. Some delay in shearing caused by rain. Beef cattle in excellent seasonal flesh. Insect problem at minimum to date. Poisoning of mormon crickets on Forest Reserve under supervision of Forestry Service has stopped in Broadwater County because of a lack of funds.

MADISON & JEFFERSON: Soaking rains throughout most of the week. 1.3 inches fell in a few hours Thursday. Severe hail storm damaged crops on the North Boulder a week ago Friday and was followed by another last Tuesday. Moisture and growing conditions very favorable. Winter wheat well headed. Spring grains heading. Beets and potatoes in good condition. Large hatch of sugar beet webworm moths in the two counties. Haying started the fore part of the week in several localities,but has been delayed by heavy rains. All hay that is down has been badly damaged. Reports of hoppers being received and a considerable quantity of bait moving. One report on Mormon crickets to be investigated today. Range and pasture conditions exceptionally good with all types of livestock doing very well. Shearing progressing rapidly. Most of the sheep already shorn.

MEAGHER: Heavy showers. Some damage by hail in southern part of county. Ground saturated. Streams high. Temperature moderate. Growing conditions excellent. Fall rye approaching harvest. Grass reported to be best for ten years. Hay crop very promising. Shearing more than one-half completed. Some clips selling at 19¢. Much wool yet unsold. No Federal wool loans reported. No lamb or calf sales. Labor supply equal to, or a little above, demand. Cricket control operations suspended at end of week on account of wet weather. Both hoppers and crickets developing very slowly.

MISSOULA: Several good showers during the week. Cool weather. Soil moisture in good condition. Rainy weather has delayed haying and damaged some hay. Hay ready to cut, but farmers waiting for settled weather. Grain, sugar beets, potatoes, etc., making good growth. Some damage and some delay to strawberry crop due to rain. Ranges and pastures improving due to rains. Labor situation balanced.

PARK: Intermittent thunder storms with sectional cloudbursts and hail causing some loss of gardens and crops in few areas. Northern and central part of county received much welcomed moisture. In general all crop conditions very good. First cutting sweet clover and alfalfa hay underway. All livestock in excellent shape due to best grass in years. Very little sale or movement of livestock or wool. Over supply of labor. More grasshoppers hatching but very little poisoning done yet. Cricket dusting continuing.

PHILLIPS: Precipitation since last Friday 1.6 inches at Malta. Good showers in all sections of the county. Cloudburst southern part caused some damage. Growing conditions good. Crop conditions very good and prospects for good yields look promising. Irrigated crops helped by rains. Sugar beet thinning and blocking practically completed. No grasshopper damage. Crickets destroyed some fields in infested area. Livestock condition best in years. Range excellent. Shearing well underway. Surplus of labor.

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PONDERA: Weather cool and rainy most of the week. However, crops responded rapidly to the added moisture. Precipitation at Conrad 1.21 inches. No damage to crops reported as a result of cloudbursts. The rain fell intermittently and slow enough all over the county to allow soil to take all the moisture that fell, which puts crop conditions in the best postition for many years. Winter wheat which had started to burn is reviving and looking good. Thinning and hoeing of beets nearing completion. Rains have halted all field work since Tuesday. Livestock in excellent condition. No report of any wool marketings. Lambs are making very rapid gains. Labor supply above demand. No damage from insects, however, grasshoppers are appearing in small patchesthat were not reported previously,

PRAIRIE: Heavy shower fell over northern section of the county Saturday night, June 18,and over northern and central parts Wednesday and Thursday of this week. General drizzle Thursday and Friday. Crops are improving from the added moisture, although wheat is burning in many sections of the county. Some alfalfa is being cut for hay. Good crop of crested wheatgrass expected from several plots in the county. There are quite a few grasshoppers and little interest is being shown in putting out poison. Range stock is doing very well. Wool clipping quite heavy and exceptionally clean. Supply of labor is greater than the demand.

RICHLAND: Approximately 2½ inches of moisture fell in the eastern part of the county with lesser portions in other parts of the county during the last two or three days of this week. This moisture has greatly improved crops both in the dry land and under irrigation. Grain crops had started burning quite badly during the previous week due to the heavy foliage on the ground which was caused by excessive stooling as a result of the cooler weather this spring. Grain crops are jointing and some earlier seeded crops are beginning to head out. Cut worms have caused quite a little loss on corn and many fields had to be replanted. First cutting of alfalfa hay is now taking place. Grasshoppers have hatched out heavily in portions of the county last week and considerable poisoning is being done, particularly in the irrigated section. Ranges are in the best condition they have been for yearsand it is expected that considerable wild hay will be harvested by many farmers this year. Sheep shearing has started.

ROOSEVELT: General precipitation over entirecounty during week, varying from one inch to several inches where cloudbursts occurred. Moisture improved growingconditions and crop prospects greatly. Some early grain fields damaged due to shortage of moisture before rains, but most in good shape. Early spring wheat and other spring grains heading out, with most of these fields over fourteen inches high. Range improved with additional moisture. Early grasses headed out and will produce seed this year. Livestock in good condition. Grasshopper poisoning continuing in sections where hoppers are numerous. Five-man crew with mixer supplying present demand.

ROSEBUD: Hot weather first of week caused rapid deterioration of drylandgrain over most of the county. Local showers of almost cloudburst proportions in many areas during the week revived most of the dryland grain. Cool weather the last half of the week. Some spring wheat too far gone to be materially benefitted by moisture. No damage reported from hail during the week. Considerable hay down and damaged by rain and floods along creek bottoms. Most range grasses headed out with an abundant seed crop practically assured. Shearing completed with fleece weights generally above normal. A few desirable clips in Ingomar territory reported sold in the neighborhood of 18¢.

SANDERS: Precipitation 1.04; temperatures--maximum 79; minimum 50. Growing conditions excellent due to heavy rains over all parts of thecounty. Winter wheat much improved by recent rains. Spring seeding very good condition and making good growth. Large amount of hay down but daily rains preventing stacking. Livestock in very good condition. Range greatly improved by rains. Crickets continue to be a serious menace to crops in Camas Prairie Section.

CHERIDAN: Heavy rains amounting to one inch and over have occurred in parts of the county during the first part of the week. A general rain of over one-half inch fell during the latter part of the week. In parts of the county during the first part of the week, the crops were suffering because of lack of moisture. Recent rains have improved conditions greatly. Most crops in the county are looking good. The danger of grasshopper damage in parts of the county appears to be very great. Grasshopper poison is being spread in most parts of thecounty. Livestock conditions continue good. No change in the labor situation.

STILLWATER: Entire week characterized by cool weather and rains ranging from slow drizzles to torrential downpours. Reports indicate that rainfall was general over the county. A total of 3.18 inches precipitation received at Columbus over the week ending at 5o'clock June 25. Damaging hail storms reported east of Rapelje, in Molt area, north and east of Columbus, and on Flaherty Flat southeast of Columbus. Extent of damage not known at this time, but will undoubtedly be heavy. All crops greatly benefitted by recent rains except in sections where hail damage occurred and where heavy downpour of rain caused lodging of grain. Haying

(Cont'd on Page 5.)

has been delayed because of inclement weather. Grass will make a wonderful growth following rains. All livestock in excellent condition. Shearingcompleted on most ranches.

SUN RIVER PROJECT: Rains of flood proportion receivedduring the week with 1.83 inches falling at Fairfield in a period of two hours. A total of 4.14 inches during the week. Very little damage done to irrigation system. Some few fields badly washed from fl oding waters. No excessive damage. Sufficient moisture to carry crops for considerable time. Sugar beets 75% thinned. Hay growing very rapidly. Good crop expected. Grasshoppers reported hatching in spots. No reports since heavy rains.

SWEET GRASS COUNTY: Cloudy and rainy. Cloudbursts and hail. Precipitation .51. Crop conditions are fine, except in Melville and Glasston districts where hail did considerable damage. Springdate district fl ods from cloudbursts did considerable damage to crops. Winter wheat is practically made from a moisture standpoint and early spring grains are well advanced. The soils are thoroughly soaked and all crops growing rapidly. 50% of alfalfa crop is out and being damaged somewhat by extensive moisture. Livestock gaining rapidly. Very little loss reported lately. Shearing still underway and delayed due to rain. Range situation, unchanged. Grasshoppers doing considerable damage in spots. Control work has not started. Crickets well under control.

TETON: Teton county certainlyhas had the rain this past week. Here at Choteau we had a total of 2.69 inches for this week as follows: 21st, 0.45; 22nd, 1.40; 23rd, 0.84. This brings the total for the month of June up to 4.17. The 48-year average for June is 2.9 inches. With the 4.84 inches of rainfall during May the prospects for a "Bumper" crop have never been any brighter. The balance of the county has received as much rain with perhaps more falling in the range area in the western part of the State. The recent rains caused some soil washing, but no serious damage has been reported in this part of thecounty. All except the first two days of the week have been extremely cloudy. Since the rain on the 23rd, the cloudy weather has kept the ground from baking. Working of summer-fallow will be delayed several days due to the wet weather. Old timers say they have never seen the country any better. The hills are covered with vegetation and a big hay crop is expected. With the limited number of livestock in the county and the abundance of rainfall, considerable natural reseeding of grass will be done. Livestock in excellent condition. Wet weather has been rather hard on shearing.

TOOLE: Weather has been continually overcast with good rains throughout the week, with an average of 2½ inches of precipitation. In addition, some areas had extremely heavy cloud bursts. Rain came at a very opportune time. Crop conditions are excellent. Wheat in some areas was just beginning to burn before the rains came. Winter wheat and fall rye, crested wheatgrass and alfalfa are in excellent condition and good yields are expected throughout the entire county. Spring wheat and other small grains are in good condition. Grass which was excellent before the rains will no doubt be better than ever. The short grasses are coming in very slowly and the grass crop is the best in many years and is assured in all parts of the country. Hay will be out in many of the lower places. Sheepmen are finding it difficult to get shearing done, due to the continually damp weather during the past nine days. Labor is plentiful.

VALLEY: Friday and Saturday of last week were warm to hot. The balance of the week cool and cloudy with rains throughout the county. Practically no wind the past week. Alfalfa haying just started prior to the rains. Crop conditions in northern and western portion of thecounty good. Crops in southern portion of the county somewhat revived by rains this week. Sugar beet thinning practically completed. Beets making good growth. Sugar beet webworms showing up in some fields. Corn doing very good. No damage done by grasshoppers yet. Livestock and pasture conditions unchanged. No labor needed. No reports of insects other than sugar beet webworms doing any damage.

WHEATLAND: Heavy rains and cool temperatures during week. Hail destroyed crops east and south of Harlowton. Heaviest loss was to hay crops east of Harlow along the river. Heavy rains and cloudbursts did considerable damage along the Musselshell drainage. Grass exceptionally good and with recent rains will be assured of best grass in years. Some livestock losses in thecounty due to the heavy rains. Shearing aboutcompleted.

WIBAUX: Precipitation at Wibaux 1.19 for the week. Rain general over all parts of the county, which has brightened the crop outlook materially. Cool weather after the rainwill also help burnt crops recover. Grasshopper control work carried on in all parts of the county with good results. Ranges good. A good hay crop is anticipated. More millet and fodder corn will be planted because of recent rains. Sheep shearing in full swing. Clips lighter than last year, also cleaner. Livestock in good condition.

(Continued on Page 6.)

YELLOWSTONE: Precipitation 3.43. Cool with heavy rains. Severe hail storms in the Shepherd District Wednesday night with about 75% crop loss. General growing conditions excellent. First cutting of hay practically all down and stacking being delayed on account of wet weather. With moisture of past week, winter wheat in dryland areas assured, unless crickets take theirtoll. A little damage to wheatby wind. Corn and beets in excellent condition. Livestock in good condition. Range grass and water holes very good. Surplus of labor. Crickets slowed up on account of cool, wet weather.

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Helena, Montana
June 29, 1938

1938:June